LEASE VERSUS BUY

Advanced Management Program

19 November 2002

Kevin Carrier Jennifer Flather Susan Keath Lance Mauro Richard Przybylek **PROBLEM**: Due to the ever shrinking Department of Defense (DoD) budget, the acquisition of more systems and equipment that use commercial technology along with current or planned reductions in manning, a need exists for development of new and innovative means to acquire and support Navy systems.

In the past, the support solutions were primarily inventory based in nature, driving larger more costly inventory investments with governmental infrastructure required for oversight and support. Under traditional support measures the emphasis has been to respond to customer's requirements without much consideration for improvements in reliability, availability or reduction in total ownership cost.

Under today's current climate it is imperative that our solutions strive to improve reliability, and availability, while affording faster technological improvements and reduction in overall ownership cost.

BACKGROUND: The Chief of Naval Operations stated in Sea Power Magazine, April 2002 that we must buy 180 – 210 aircraft and 8 – 10 ships every year to sustain a fleet of approximately 300 ships. Naval Power 21...A Naval Vision dated October 2002 refers to a need to increase the number of strike groups. It is believed that we could double the number of strike groups available today with a 25% increase in the size of the fleet.

RADM McCarthy, Commander, Naval Supply Systems Command, stated, "what we need



now is to sustain the fleet through replacement of ships and aircraft that have reached the end of their useful life." To do that requires an additional \$10B annually for the recapitalization of the fleet, which must come from reductions in infrastructure, manpower and reduced inventory investments, all of which is driving major transformation within the Department of the Navy.

Additionally, the Navy is looking to downsize the manning on ships of the future. Recent experiments like the testing of the USS MILIUS (DDG 69), which went through its Interdeployment Training Cycle (IDTC) with only 232 crewmembers or 20% less crew than the usual compliment for an Arleigh Burke class guided missile destroyer demonstrated the need for moving work off the ship.

<u>DISCUSSION</u>: One possible option is for agencies to consider leasing vice buying equipment to reduce total ownership costs. Leasing provides flexibility, lower initial government outlay, and may shift risks of obsolescence to the lessor.

The leasing method is appropriate when it is advantageous to the Government and may also serve as an interim measure when the circumstances require immediate equipment use to meet program or system goals, but do not support acquisition by purchase.

Once totally reliant on military specific equipment, the military has not traditionally used leases to acquire equipment, especially machinery with a lifespan of at least 30 years.



However, in today's climate of quickly changing technology the military can no longer expect to stay in the forefront utilizing outdated buying methods and procedures. A shift to Commercial Off the Shelf (COTS) products has paved the way for alternative purchase solutions.

Generally the lease versus purchase decision is not made as a part of an evaluation of competitive offers. Rather, it is made based on data collected especially for that purpose. There are however, situations in which it may make sense to solicit such competition. For example, if equipment requires a unique maintenance capability, competition may be solicited to determine which alternative offers the best value, lease including maintenance or purchase with contract or in-house maintenance.

The Navy has leased equipment before and leases equipment today. The types of equipment or systems that DoD has traditionally leased in the past have ranged from office equipment such as telephones, computer systems, copy machines, etc... to larger items such as vehicles and Maritime Pre-positioning Ships. Currently, there is a proposal from the Air Force to lease four 737 Executive Aircraft for high-level personnel transportation and 100 - 767 tanker aircraft to do in-flight refueling.

It is important that viable candidates be selected when considering leasing equipment or systems. Agencies should consider whether to lease or purchase equipment based on a case-by-case evaluation of comparative cost and other factors. The evaluation should be



conducted with consideration to costs and the following factors; the estimated life cycle of the equipment and the extent of use within that period, financial and operating advantages of alternative types and makes of equipment, the cumulative rental payments for the period of the lease, the net purchase price, maintenance and other service type of costs, in COTS types of equipment potential obsolescence of the equipment, because of imminent technological improvements, and disposal or life of type procurement requirements. In addition, the acquisition team should consider availability of purchase options; potential use of the equipment by other agencies after its use by the acquiring agency; trade-in or salvage value; imputed interest; and availability of a servicing capability, especially for highly complex equipment.

Leasing Commercial Off the Shelf (COTS) type equipment has some advantages, which include managing obsolescence and diminishing manufacturing sources, thus eliminating the need for life of type procurements while fostering technology insertion and technology refresh. In today's high tech environment, equipment has a much shorter life span and therefore becomes a great burden on the supply system. By leasing equipment the Navy has the ability to maintain the technological edge that is so important to maintaining our advantage over our adversaries. Leasing also will eliminate the necessity to maintain parts onboard and will free funds used to maintain onboard repair parts and system stock that becomes obsolete along with the material it supports.



In past leasing experiences, the Navy concentrated on purchasing the end item only, not considering a suite of support options that would significantly enhance the lease by reducing infrastructure costs. Four specific areas should be considered: inventory (range and depth), maintenance packages, training and reduced manning. A lease that includes an integrated logistics package consisting of equipment maintenance, spare parts, and training could help support the required decrease in manning afloat as well as ashore. Inventory reductions could be obtained through having the lessor provide repair parts as contractor owned inventory. In order to meet immediate need for repair at sea, the lessor would provide a pack-up kit or onboard repair parts of limited range and depth comprised of high-demand, critical components. The results being reduced inventory investments. Options for a service and maintenance package mandating that the lessor provide both preventative and corrective maintenance can be added. The potential exists for the inclusion of upfront and periodic training for onboard personnel that would be required to operate and do initial maintenance which reduces the Navy training school requirements. Reduced inventory requirements, contractor provided maintenance and training would result in reduced manning requirements afloat and ashore.

Concerns about the budgetary impact of the leases' long-term funding commitments and uncertainties about their cost-effectiveness led Congress to establish a number of statutory conditions and requirements for entering into long-term leases that are now codified in 10 U.S.C. 2401. The code increased congressional control over certain lease decisions, made lease decisions more transparent, and provided for the development of



more detailed guidelines for conducting lease versus purchase cost comparisons. In general, 10 U.S.C. 2401 requires long-term leases of vessels and aircraft, or leases with substantial termination liabilities be specifically authorized by law.

RECOMMENDATION: Leasing should be considered on a case-by-case evaluation of comparative costs and other factors. Generally, the purchase of equipment or systems is less expensive then leasing or renting. Validating that a lease requirement exists must be accomplished before leasing may be considered as a viable alternative. However, leasing may be more advantageous in the following circumstances: short duration of requirement for equipment, an evaluation period is required to ensure that the equipment is properly suited for the intended use, changing technology is so rapid that the equipment will become obsolete before it is fully depreciated, extremely expensive cost, unavailable for purchase, purchase funding is unavailable, urgent and compelling need, and limited sources of supply. Leasing can still be a suitable alternative, even though it may be economically more favorable to purchase after all of the pertinent factors are considered.

